

Application No.: 10/826,866
Office Action dated: January 16, 2007
Response to Office Action dated: April 5, 2007

REMARKS

Claims 1-6, 8-18 and 20-26 are pending. Claims 1, 3, 16-18, 20, 21, 23 and 24 are amended herein.

Claims 1-4 and 26 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Beane et al. (U.S. Patent Application Publication No. 2002/0022762). The rejection is traversed and reconsideration is respectfully requested.

Beane et al. is directed to a lens warming and cleaning device for use with an optical instrument having a lens portion. The device comprises a heat-conducting tube sized and shaped to receive the lens portion of the optical instrument. A heating element is thermally coupled to the tube. A cleaning member is disposed within the tube such that when the lens portion of the optical instrument is inserted into the tube, the lens portion contacts the cleaning member. The heating element as shown in the embodiments is a heating pad which includes a flexible, air-permeable outer bag that encases a chemical mixture. The chemical mixture, when activated, generates an exothermic reaction. The chemical mixture can be, e.g., a mixture of iron powder, water, cellulose, vermiculite, activated carbon, and salt. Exposing the mixture to atmospheric oxygen triggers an exothermic reaction that warms the pad.

Beane et al. does not teach or suggest an apparatus for heating or defogging a scope wherein the apparatus includes a self-sealing mechanism in an inlet for preventing a defogging solution from spilling out of the inlet, as is generally recited in independent claims 1, 3 and 26. This is not surprising since Beane et al. teaches a saline solution retained in a sponge.

In support of the rejection, the Examiner states in the Office Action dated January 16, 2007:

In this case, Beane et al. disclose the device wherein the distal end 124 is attached to bottle 118, and proximal end 122 is attached to a stem 126 on

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housing 112. Distal end attaches to bottle 118 via complementary screw threadings 128 (inside tube 114) and 130 (on bottle 118). Alternatively, bottle 118 and distal end 124 can be attached by an interference or press fit, using, e.g., an O-ring. An O-ring by definition creates a watertight seal between the walls of [sic] two adjoining components and thus prevents leakage out of the inlet. Proximal end 122 is similarly attached to stem 126 using, e.g., complementary screw threadings, an insert mold, or an interference fit (see paragraph 0053). The interference or press fitting is configured to allow the endoscope to enter the canal and make contact with the defogging material and further prevents spillage, via the O-ring, of the material out of the inlet of the canal, thus meeting the limitations of claim 1, as broadly claimed.

We do not understand and therefore disagree with the Examiner's grounds of rejection. In our Response to Final Office Action dated September 6, 2006, we state that the interference or press fit referred to by the Examiner merely has to do with how the walls of the bottle 118 and the tube 114 are attached to one another at a distal end 124 of the tube 114, and how the walls of the tube 114 and the housing 112 are attached at a proximal end 122 of the tube 114. The interference or press fit has nothing to do with teaching a mechanism disposed within the tube 114 which would self-seal so as to obstruct and prevent fluid from spilling out of the tube. This is not surprising because Beane et al. does not need a self-sealing mechanism. The solution of Beane et al. is retained in a sponge. The published present application at paragraph [0032] lists examples of self-sealing mechanisms as, for example, a tube within a tube mechanism, valves including those resembling a heart valve or a valve in a human vein, a flap and hinge valve which opens only in one direction, and a ball and socket mechanism.

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The Examiner issued an Advisory Action dated September 28, 2006 and therein responded to the above-mentioned arguments in support of patentability by stating:

Beane et al. disclose a device wherein bottle 118 and distal end 124 can be attached by an interference or press fit, using, e.g., an O-ring. The interference or press fitting is configured to allow the endoscope to enter the canal and make contact with the defogging material and further prevents spillage, via the O-ring, of the material out of the canal, thus meeting the limitations of the claims as broadly as claimed.

It is still not clear why the Examiner believes that the O-ring can prevent spillage out of the inlet of the canal. As mentioned above, the O-ring connects the walls of two components of the device together. Applicant is not sure whether the Examiner is arguing that the O-ring prevents leakage through the walls of the attached components at the connection point. However, even if the O-ring were to prevent such leakage, the O-ring cannot prevent fluid from flowing through the open interior of the O-ring and spilling out of the inlet of the canal.

In support of the rejection, the Examiner states:

...it is noted that the features upon which applicant relies (i.e., preventing fluid leakage from *both* ends of the cavity inlet) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims....

It is not clear what the Examiner is referring to when he states that the features upon which applicant relies (preventing fluid leakage from both ends of the

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cavity inlet) are not recited in the claims. The claims of the present application recite a housing with an outer surface defining an inlet of a cavity. The claims do not recite "both ends of the cavity inlet" because the cavity inlet defined by the outer surface has only one end. There is no other end of the cavity defined by the outer surface for receiving an endoscope. Moreover, Beane et al. also shows a device having only one end of a cavity inlet for receiving a scope.

For an anticipation rejection to be appropriate, each and every element or limitation in a rejected claim must be shown in a single prior art reference used in the claim rejection. Because Beane et al. does not teach or suggest a method or an apparatus for heating a solution including a self-sealing inlet, as is generally recited in independent claims 1, 3 and 26 of the present application, it cannot be maintained that Beane et al. anticipates these independent claims. Moreover, because claims 2 and 4 each ultimately depend from and thereby incorporate the limitations of independent claim 1, these dependent claims are not anticipated by Beane et al. for at least the reasons set forth for claim 1.

Claims 5, 6, 8-18 and 20-25 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Beane et al. (U.S. Patent Application Publication No. 2002/0022762) in view of Brodsky (U.S. Pat. No. 5,351,675). The rejection is traversed and reconsideration is respectfully requested.

Beane et al. does not teach or suggest a method or apparatus for defogging a scope wherein the apparatus includes a self-sealing mechanism in an inlet for preventing a defogging solution from spilling out of the inlet, as is generally recited in independent claims 5, 16-18 and 20-25. This is not surprising since Beane et al. teaches a saline solution retained in a sponge.

Moreover, Beane et al. does not teach or suggest a method or apparatus for defogging a scope, wherein the apparatus includes breachable membranes separating chambers containing reactants configured such that when the membranes are breached permit the reactants to mix and generate a sustained exothermic

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reaction for heating a defogging solution and a scope when submerged in the defogging solution, as is generally recited in independent claims 5, 16-18 and 20-25. Rather, Beane et al. shows a heating pad which generates an exothermic reaction when exposed to atmospheric oxygen. Furthermore, Beane et al. does not teach or suggest a method or apparatus for defogging a scope, wherein the apparatus includes a defogging solution or other fluid disposed within a hollow receptacle or reservoir configured for allowing an instrument to be submerged in and heated via the fluid, as is generally recited in independent claims 5, 16-18 and 20-25. Rather, Beane et al. shows a sponge upon which an instrument merely abuts against for cleaning and heating.

Brodsky is directed to a method and apparatus for preheating an optical instrument prior to use thereof in a medical procedure. More specifically, a laparoscope is employed in combination with an apparatus for preheating the laparoscope prior to use thereof in a medical procedure. The laparoscope includes an elongated optical shaft portion which is adapted to be received in the body of a patient. The apparatus comprises an elongated sleeve dimensioned for receiving the shaft portion therein. The sleeve has an open end and a closed end and includes flexible inner and outer walls which cooperate to define a compartment therebetween. The inner wall defines an inner pocket dimensioned for receiving the laparoscope therein. The pocket has an open end and a closed end which correspond to the open and closed ends of the sleeve, respectively. The compartment substantially completely surrounds the pocket, and includes heating means in the compartment for heating the shaft portion.

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The Examiner cites Brodsky for showing an apparatus using an exothermic chemical reaction for heating an object. However, as mentioned above, Beane et al. does not teach or suggest a method or apparatus for defogging a scope wherein the apparatus includes a self-sealing mechanism in an inlet for preventing a defogging solution from spilling out of the inlet, as is generally recited in independent claims 5, 16-18 and 20-25. Accordingly, Beane et al. contains insufficient teaching as a primary reference when taken either alone or in combination with Brodsky to render claims 5, 16-18 and 20-25 obvious. Moreover, because claims 6 and 8-15 each ultimately depend from and thereby incorporate the limitations of claim 5, these dependent claims are not obvious for at least the reasons set forth for claim 5.

In view of the foregoing, it is respectfully submitted that claims 1-6, 8-18 and 20-26 are in condition for allowance. All issues raised by the Examiner having been addressed, an early action to that effect is earnestly solicited.

No fees or deficiencies in fees are believed to be owed. However, authorization is hereby given to charge our Deposit Account No. 13-0235 in the event any such fees are owed.

Respectfully submitted,

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